

Final Environmental Impact Statement



The public is invited to review and comment on the final Environmental Impact Statement (FEIS) for TVA's Reservoir Operations Study during a 45-day period continuing through April 12, 2004.

Comments may be submitted via the ROS Web site at www.tva.com/ros; by mail to TVA Reservoir Operations Study, WT 11A, 400 West Summit Hill Dr., Knoxville, TN 37902; or by fax to 865-632-3146.

The FEIS and fact sheets describing the projected impacts on specific reservoirs are available on the ROS Web site listed above or by calling TVA toll-free at 888-882-7675.

A paper copy of the FEIS also may be available at your local public library. A list of libraries can be found on the ROS Web site listed above.

- TVA staff are recommending changes in the policy that guides TVA's operation of the Tennessee River and reservoir system.
- These changes are designed to achieve the objectives identified by the public and others who participated in the scoping process conducted at the beginning of TVA's Reservoir Operations Study (ROS). The ROS is a comprehensive review of how TVA operates the reservoir system.
- As part of scoping, TVA received more than 6,000 individual comments, about 4,200 form letters, and petitions signed by more than 5,400 members of the public. In addition, 3,600 residents in TVA's power service area answered a random telephone survey conducted by an independent research firm.
- TVA also reviewed input from members of two groups established to ensure that federal and state agencies and members of the public are actively involved throughout the study: the Interagency Team, which includes representatives from 10 federal agencies and six Valley states, and the 13-member Public Review Group, which includes representatives from various businesses, municipal utilities, and stakeholder groups.
- TVA staff used the objectives identified through this process to develop and evaluate a broad range of alternative policies for operating the reservoir system. Those alternatives were outlined in the draft Environmental Impact Statement (DEIS) released last summer.
- Careful evaluation of the DEIS alternatives—including additional public review, data collection, statistical analysis, computer modeling, and qualitative assessment—determined that all had unacceptable impacts on one or more of the scoping objectives.
- TVA developed the Preferred Alternative by combining elements of the DEIS alternatives that supported the objectives of navigation, reservoir recreation, tailwater recreation, and scenic beauty. Adjustments also were made to avoid or reduce unacceptable impacts to other objectives, including flood risk, water quality, power supply, aquatic species, wetlands, and shoreline erosion.
- Under the Preferred Alternative, TVA would no longer target specific summer pool elevations. Instead, reservoir operations would be aimed at managing the flow of water through the system to meet the objectives identified during the scoping process.
- This approach would increase recreation opportunities on tributary storage reservoirs by limiting the drawdown of those reservoirs from June 1 through Labor Day, as long as rain-fall and runoff are sufficient to meet project-specific and system-wide flow requirements.
- Flow requirements also would be used to protect water quality and aquatic resources, ensure year-round commercial navigation, and provide an adequate supply of cooling water for TVA's coal-fired and nuclear power plants.
- Additional water—beyond that required to meet flow requirements—would be released from tributary storage reservoirs only when necessary to preserve the reliability of the TVA power system.
- The Preferred Alternative also responds to public comments about the importance of drawing water from tributary storage reservoirs equitably. Reservoir operating guides would be modified to balance pool levels from June 1 through Labor Day by ensuring that each reservoir provides a fair share of the water needed to meet flow requirements for downstream system needs.

The Preferred Alternative at a Glance

Impacts on the objectives identified during scoping

Improving recreation on reservoirs and tailwaters; increasing revenue from recreation; protecting and improving the scenic beauty of reservoirs

- The Preferred Alternative would increase recreation opportunities, revenue from water-based recreation, and scenic value by limiting the drawdown of tributary reservoirs from June 1 through Labor Day.
- When water must be released from these reservoirs during this period to meet flow requirements for downstream needs, the operating objective would be to balance pool levels by drawing a fair share of the needed water from each reservoir.
- Summer operating ranges would be maintained through Labor Day on four main-stem projects (Chickamauga, Gunterville, Wheeler, and Pickwick).
- Higher winter operating ranges would be established on 10 tributary reservoirs (Boone, Chatuge, Cherokee, Douglas, Fontana, Hiwassee, Norris, Nottely, South Holston, and Watauga).
- Great Falls Reservoir would be filled to the summer operating level by Memorial Day.
- Expanded and more dependable scheduled releases for tailwater recreation would be provided at five additional tributary projects (Ocoee #1, Apalachia, Norris, Watauga/Wilbur, and South Holston).

Lowering the cost of transporting materials on the commercial waterway

- The Preferred Alternative would enable barges to carry more tonnage for the same cost by providing continuous minimum flows up to 25,000 cubic feet per second at Kentucky Dam to better maintain a minimum tailwater elevation of 301 feet and a 12-foot navigation channel below Kentucky.
- It also would raise the minimum winter elevation at Wheeler Reservoir by six inches to better maintain the full 11-foot channel depth throughout the entire main river.

Reducing flood risk and flood-related damages

- Under the Preferred Alternative, flood damages for flood events up to a 500-year magnitude would not increase above the current level at any of the critical locations within the Tennessee Valley, including Chattanooga. A flood event of a 500-year magnitude has a 1-in-500 chance of happening in any given year.
- Fill operations on Fort Loudoun, Watts Bar, and Chickamauga reservoirs would be delayed until mid-May to reduce the risk of flooding at Chattanooga.

Supplying low-cost, reliable electricity

- Under the Preferred Alternative, water stored in TVA-managed reservoirs could be used during critical power system situations to preserve the reliability of the TVA power system.
- Some hydropower generation now used to meet peak power demand in the summer would be shifted to the winter and early spring. As a result, other, more costly generation sources such as coal, combustion turbine units, or purchased power would have to be used during periods of peak demand in the summer, resulting in slightly adverse impacts on power supply costs.

Improving water quality in reservoirs and tailwaters; improving aquatic habitat in reservoirs and tailwaters

- Because the Preferred Alternative could have slightly adverse impacts in some tailwater areas, TVA would continue to invest in equipment to add oxygen to water released through TVA dams.
- TVA would continue to meet the minimum flow and dissolved oxygen targets adopted as part of the 1991 Lake Improvement Plan.
- Continuous minimum flows would be provided between Apalachia Dam and the powerhouse from June 1 through Nov. 1 to enhance aquatic habitat in the bypass reach.

Providing water for municipal, agricultural, and industrial purposes

- Water supply benefits and treatment costs to municipalities, industries and others under the Preferred Alternative would be similar to current policy.

Minimizing erosion of reservoir shoreline and tailwater riverbanks

- Extending the duration of summer pool levels could result in a slight increase in shoreline erosion under the Preferred Alternative.
- TVA would continue to monitor the rate of shoreline erosion to address impacts on sensitive cultural resource sites.

Protecting and improving wetlands and other ecologically sensitive areas; increasing protection for threatened and endangered species

- TVA would monitor specific wetland plant communities and threatened and endangered species to address effects related to the Preferred Alternative.
- Those effects would be minimal, but could range from slightly adverse to slightly beneficial.